The Impact of Gender, Family, and Mental Health Issues on Displays of Relational Aggression in a Sample of Court-Involved Youth

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TABLE OF CONTENTS

INTRODUCTION

Aggression is a topic that most see through the lens of verbal or physical attacks. However, there are many subtleties in aggression that have gone unnoticed by much research. To view aggression as simply direct attacks on a person is very limiting in understanding of aggression. Aggression can be more covert and not as detectable. This more covert style of aggression also can be confrontational or nonconfrontational depending on the presence of the aggressor (Xie, Swift, Cairns, & Cairns, 2002). Typically, however, aggression is predominantly understood by many as direct physical and verbal attacks instead of these more covert methods.

Youth who display an overt style of aggression have been given the most attention by reseachers. Overt aggression, sometimes called direct aggression, is defined as using physical or verbal attacks to harm a peer (Prinstein, Boergers, & Vernberg, 2001). Typically, males are more likely than females to be both the perpetrator and the victim of overt aggression (Crick & Grotpeter, 1995).

A different side to aggression that has, until recently, not been given as much attention by researchers is known as relational aggression. Relational aggression sometimes is categorized under several other terms, especially indirect aggression and social aggression. While these other terms have been defined somewhat differently by various researchers, the general definition of this form of aggression is the use or manipulation of relationships in order to cause harm to another individual (Prinstein, Boergers, & Vernberg, 2001).

Because relational aggression is a form of aggression that has only more recently been the focus of research, there is less understood about it. The role of gender has been given some attention in the relational aggression literature, but findings regarding gender and relational aggression have been varied and conflicting. Some of the literature finds that girls are more

likely to be involved in relational aggression than boys where other literature says that there are no such gender differences.

At the same time, at least two other factors should be considered in understanding youth who display relational aggression. One factor is the youth's family, and the other factor is the mental health of the youth. Gender and family risk have been shown in research to be highly related, mental health and gender are also strongly related, and mental health and family risk have been shown to be related to one another in studies of youth. Thus, relational aggression may be linked to these additional factors.

STATEMENT OF MAJOR PURPOSE

The purpose of this study is to examine relational aggression in order to build more conclusive evidence as to why some youth are more at risk for being perpetrators or victims of relational aggression. Specifically, this sample of youth should provide insight for several reasons. The sample is court-involved male and female adolescents who exhibit a wide range of mental health symptoms and have various family backgrounds. Their higher risk for family and mental health problems, in conjunction with their delinquent backgrounds, provide an ideal sample that can be used to examine the relationships among these key variables of interest.

DEFINITION OF TERMS

gender – self-identification of possessing masculine or feminine characteristics

relational aggression – using a peer relationship in a non-physical manner to purposefully damage or manipulate it in order to inflict harm

indirect aggression – similar to relational aggression, without including direct verbal encounters; all aggression is done without the victim's apparent knowledge

social aggression – similar to relational aggression but a nonconfrontational form of aggression where social circles are used to transmit the aggression

overt aggression –using direct physical or verbal attacks to harm a peer

Global Risk Assessment Device (GRAD) – a tool to measure risk factors in court-involved youth containing eleven domains (prior offenses, family/parenting, education/vocation, peers/significant relationships, personality/behavior, sociability, substance use/abuse, leisure, trauma, accountability, health services)

relational aggression risk – reporting high risk levels on select items in the subdomain of relational aggression in the GRAD domain of peer relationships

family risk – reporting high risk levels on the GRAD domain of family/parenting

mental health risk – reporting high risk levels on the GRAD domain of personality and behavior (mental health)

HYPOTHESES (for figure, see Appendix A)

1. Gender will significantly impact family, mental health, and relational aggression. More specifically, females will exhibit higher risk scores than males on all three measures of these variables.
2. Risk scores in the family domain will be significantly related to risk scores in the peer relationships subdomain of relational aggression. More specifically, higher levels of family risk will be significantly associated with higher risk scores in the relational aggression subdomain.
3. Risk scores in the mental health domain will be significantly related to risk scores in the peer relationships subdomain of relational aggression. More specifically, higher levels of mental health risk will be significantly associated with higher risk scores in the relational aggression subdomain.
4. Risk scores in the family domain will be significantly related to risk scores in the mental health domain. More specifically, higher levels of family risk will be significantly associated with higher risk scores in the mental health domain.

REVIEW OF RELATED RESEARCH

Relational Aggression

As mentioned previously, there is some inconsistency in defining relational aggression. Relational aggression is defined by some researchers as aggression where a peer relationship is either damaged or manipulated in order to inflict harm (Prinstein, Boergers, & Vernberg, 2001). Other researchers have focused on a similar type of aggression termed indirect aggression;

similar to the definition of relational aggression, this variable does not include any direct verbal attacks (Salmivalli, Kaukianinen, & Lagerspetz 2000). In other words, the individual on the "receiving" end is unaware of the immediate act of aggression. Hence, it is seen as "covert" aggression. Another type of covert relationship aggression is social aggression where the social community is used to perform non-confrontational aggressive acts (Xie, Swift, Cairns, & Cairns, 2002). All of these forms of aggression have the function of harming someone through a relationship, but on to describe different ways of carrying out those aggressive acts.

The definition adopted for use in this study is taken from the work of Crick's and colleagues. Their definition of relational aggression involves the behaviors that damage another youth's friendship or feelings of inclusion by the peer group (Crick & Grotpeter, 1995). This includes both confrontational and nonconfrontational means: either the aggressor can be present at the time of the aggressive act, or the aggressor is not present, but uses social networks to perform the aggression (Xie, Swift, Cairns, & Cairns, 2002). This includes things like threatening friendships, a kind of direct verbal attack, as well as more indirect actions, such as ignoring. This definition will be the basis for this study because of the importance of both indirect *and* direct kinds of manipulation that can be used to harm a relationship. Youth can use more direct attacks, like verbal attacks, to hurt the relationship, and not only the indirect kinds suggested through definitions of indirect aggression and social aggression.

These variations in definitions represent an underlying problem in researching the phenomenon of aggression; there is a fine line between including verbal aggression in overt aggression or in relational aggression. Some studies of domestic violence have found verbal aggression to be distinct from physical aggression, whereas other research has found it to be distinct yet correlated to physical aggression (Julian, McKenry, Gavazzi, & Law, 1999). Hence,

verbal aggression can be seen playing a role in more overt styles of aggression as well as more covert styles of aggression.

Thus, it is theorized that there is some overlap between overt and covert forms of aggression. However, in the relational aggression literature there is no consistency in operationalizing relationship aggression, and so the operationalizations used to research it have varied as well. Some researchers, such as Crick and colleagues (1995; 1996), define this relationship aggression as relational aggression. Their definition is the behaviors that damage another youth's friendship or generate feelings of exclusion by the peer group (Crick & Grotpeter, 1995). Other researchers have looked at indirect aggression where an aggressor harms a peer through social manipulation (Salmivalli, Kaukianinen, & Lagerspetz, 2000) and is present at the time of the aggression making the attack confrontational (Xie, Swift, Cairns, & Cairns, 2002). One other way to define this type of aggression is as social aggression. This is defined as damaging a relationship through the nonconfrontational and mostly concealed use of the social community (Xie, Carins, & Cairns, 2002). These differences in how this type of aggression is defined may therefore produce different results in studies.

Following that there are different ways to operationalize relationship aggression, another difference in the literature is the way that the data is collected. Popular methods of data collection seem to vary in directness. Peer nomination is one method of understanding peer relations. This is where the aggressors and victims are indicated by other youth. Another way to gather data is through self-identification. This is often accomplished through questionnaires that ask questions specifically directed to the individual. Yet another method is through parental identification, where a parent identifies aggression in his or her child or children.

Studies on relational aggression also have varied in terms of their focus on different age groups. Some study relational aggression in adolescence (Salmivalli, Kaukianinen, & Lagerspetz, 2000; Prinstein, Boergers, & Vernberg, 2001; Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001) while others have examined this phenomenon in middle childhood (Crick & Grotpeter, 1995; Grotpeter & Crick, 1996; Phelps, 2001; Xie, Cairns, & Cairns, 2002). This is an important fact to note because of the developmental implications. For instance, one study found that there was an increase in relational aggression in a span of three years from grades 4 to 7, specifically in female to female aggression (Xie, Cairns, & Cairns, 2002).Hence, relational aggression may be a concept well that is best understood developmentally.

Another important aspect of the previous literature is how it looks at perpetrator versus victim status. In other areas of study, such as abuse, it has been found that often perpetrators were victims in the past. One study looked at a sample of adolescent boys who were perpetrators of sexual aggression, and found that they often repeated what acts were done to them when they were victims of sexual abuse (Burton, 2003). Another study looked at verbal abuse in families and found that children in these environments often became more physically aggressive over time (Spillane-Grieco, E., 2000). Hence, it follows that youth who were victims of relational aggression by their peers may also become aggressors.

Gender and Relational Aggression

> Hypothesis 1: Gender will significantly impact family, mental health, and relational aggression. More specifically, females will exhibit higher risk scores than males on all three measures of these variables.

Most of the research related to relational aggression is focused on its relationship to gender. Some studies have found that relational aggression is significantly more likely to be

displayed by females than males (Crick & Grotpeter, 1995; Crick & Bigbee, 1998; Xie, Cairns, & Cairns, 2002; Salmivalli, Kaukianinen, and Lagerspetz, 2000).

Crick and Grotpeter (1995) used a sample of 491 3rd-6th graders from public schools in a Midwest town in order to examine relational aggression as the "harming others through purposeful manipulation and damage of their peer relations" (p.711). Sixty percent of these youth were European-American, 37% were African-American and 3% were other. The instrument used was a peer nomination instrument given in two-60 minute sessions. They found that relational aggression was more characteristic of girls, and that these girls were subjected to more social problems and had negative social-psychological adjustment.

Crick and Bigbee (1998), defining relational aggression in the same manner as Crick and Grotpeter (1995), used a combination of a self-report and peer nomination devices with a sample of 383 4th and 5th graders from four public schools in the Midwest. This sample was 90.1% European-American, 9.4% African-American, and 0.5% from other ethnic groups. Findings from this study indicated that girls were more likely than boys to be the victims of relational aggression acts.

Xie, Cairns, and Cairns (2002) defined interpersonal aggression differently, using the term "social aggression" as a means of describing the use of the social community indirectly and often surreptitiously to damage a relationship. The emphasis on this definition is that the social circle is used to damage the relationship. They compared 220 4th graders with 290 7th graders from public schools in mid-Atlantic states. Using both peer nomination and self-reports measures, these researchers reported that girl to girl conflicts were found to make up the highest proportions of social aggression.

Where Crick and colleagues operationalized relational aggression as both direct verbal attacks as well as attacks done indirectly to the victim, Salmivalli and colleagues (2000) operationalized indirect aggression as only indirect attacks, like gossiping and ignoring. The emphasis on their definition is the lack of direct confrontation. These researchers examined a sample of 209 Finnish adolescents who were 15-16 years old. The instruments used in this study asked about direct physical aggression, direct verbal aggression, and indirect aggression through means of both self-evaluation and peer nomination. This study found that girls used more indirect aggression than other forms of aggression, and boys used more direct aggression, including verbal and physical forms of aggression.

While the above-mentioned studies indicate that gender plays an important role in determining who is involved in relational aggression, there also has been research that has reported no significant links between relational aggression and gender. In these studies, females and males have been found to be equally likely to be involved in relational aggression (Phelps, 2001; Prinstein, Boergers, & Vernberg, 2001; Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001).

Phelps (2001) looked at relational aggression using the same definition as Crick and colleagues (1995;1996). The sample used in this study included 549 3rd-6th graders from public schools in the Midwest. All participants were Caucasian. The measures used were self-report questionnaires regarding victimization, and results indicated that girls and boys did not differ in their reports of relational aggression.

Prinstein, Boergers, and Vernberg (2001) also operationalized relational aggression similar to that of Crick and colleagues (1995; 1996). The sample consisted of 566 adolescents from a small New England public school. Of the participants, 21.8% were Caucasian, 60.3%

Hispanic, 10.6% African-American, and 7.3% other or mixed ethnicity. This study looked at both victimization and aggression through use of a self-report measure. While these researchers found that overt forms of aggression and victimization were more common with boys, relational aggression was reported comparably by both boys and girls.

Tiet, Wasserman, Loeber, McReynolds, and Miller (2001) defined relational aggression as using a relationship to harm others, similar to other studies. However, this study was a little different than many of the others in that it used court-referred boys and their siblings as the sample. The sample consisted of 308 youth under 18, with an average age of 12.9 years. There were 54% African-American, 42% Hispanic, and 4% other. The measures used involved mothers' reports on her biological children regarding aggression. These researchers reported that relational aggression levels in girls and boys are at relatively equal levels.

Gender and Family

> Hypothesis 1: Gender will significantly impact family, mental health, and relational aggression. More specifically, females will exhibit higher risk scores than males on all three measures of these variables.

Relationships between family problems and gender have been found in research. For instance, in a sample of court-involved youth Gavazzi, Yarcheck, and Lim (in press) found that girls are at significant greater risk for family-related problems more than boys are. Another study looked at a sample of Australian families who had infants between the ages of 4 – 8 months in 1983 until the time that the youth were 17 – 18 years old. This study found that girls facing difficult family transitions experience both more behavior problems and internalizing symptoms than boys (Ruschena, Prior, Sanson, & Smart, 2005). Finally, in a study of shelter

children aged 6-12 whose mothers were abused, girls were found to be more maladjusted than boys (Cummings, Pepler, & Moore, 1999).

Gender and Mental Health

> Hypothesis 1: Gender will significantly impact family, mental health, and relational aggression. More specifically, females will exhibit higher risk scores than males on all three measures of these variables.

Much research has found that mental health issues are strongly related to gender. A general consensus of much of the current literature is that females are more at risk for mental health problems, especially those problems related to depression and anxiety (Rosenfield, Vertefeuille, & McAlpine, 2000; O'Hare, 1995; Broderick & Korteland, 2002; Rudolph, 2002). One study of 803 adolescents in urban and suburban schools regarding gender stratification as a means of explaining gender differences in mental health issues found that girls empathized more than boys and that girls demonstrated higher levels of depressive symptoms (Rosenfield, Vertefeuille, McAlpine, 2000). O'Hare (1995) examined a sample of 376 adult alcohol abuse patients at an outpatient mental health center. This study indicated that females have higher rates of depression, anxiety and other psychophysiological symptoms than men, who had more legal problems as a result of their alcohol abuse. Another study looked at coping styles of early adolescents in regards to their gender and level of depression. Findings show that girls had overall higher levels of depression than boys the same age (Broderick & Korteland, 2002). Rudolph (2002) looked at responses to interpersonal stress in a sample of 460 fifth through eight graders and found that girls are more likely than boys to show negative emotional responses through anxiety and depression.

Research has also found strong relationships with gender, family, and mental health. When a family has great stress placed upon it, a situation is sometimes created where mental health problems can emerge in children. A study of 284 students aged 10 – 16 in Phoenix high schools by Formoso, Gonzales, and Aiken (2000) looked at protective factors in both parents and adolescents in regards to family conflict and children's internalizing and externalizing behaviors. The researchers found that family conflict is positively related to depression, especially for girls. Another study examined 55 adolescents between the ages of 11 and 18 who had a parent with cancer. It was found that when girls are put into a situation where they are faced with interpersonal stress, the result is often an increased risk for anxious and depressed symptoms. The risk level for girls is greater than for boys in the same situation (Grant & Compas, 1995).

Relational Aggression and Mental Health

> Hypothesis 3: Risk scores in the mental health domain will be significantly related to risk scores in the peer relationships subdomain of relational aggression. More specifically, higher levels of mental health risk will be significantly associated with higher risk scores in the relational aggression subdomain.

Little research has looked into relational aggression other than in regard to gender and interactions with peers. Some research has, however, found that relational aggression is linked to mental health issues, such as negative psychological adjustment (Crick & Bigbee, 1998; Crick & Grotpeter, 1995; Prinstein, Boergers, & Vernberg, 2001). One of these studies (Prinstein, Boergers, & Vernberg, 2001) looked at the social-psychological adjustment of both aggressors and victims in a sample of 566 adolescents from a high school in New England. Findings suggest that perhaps being involved in relational aggression can be either a result of the psychological maladjustment or a cause of the psychological maladjustment. In other words, relational aggression and psychological maladjustment mutually contribute to each other. Crick

and Bigbee (1998) looked at a sample of 383 4th and 5th graders in Illinois public schools regarding peer victimization. They found that victims of relational aggression experience social-psychological adjustment problems. A study by Crick and Grotpeter (1995), looking at relational aggression, gender, and social-psychological adjustment in 491 3rd-6th graders in four public schools in the mid-west, found that relational aggression is significantly linked to social maladjustment.

Relational Aggression and Family Factors

> Hypothesis 2: Risk scores in the family domain will be significantly related to risk scores in the peer relationships subdomain of relational aggression. More specifically, higher levels of family risk will be significantly associated with higher risk scores in the relational aggression subdomain.

In one study (Chang, Schwartz, Dodge, & McBride-Chang, 2003) of a sample of 325 Chinese kindergarten students, a link between incompetent social behaviors, including the use of aggression, was found in relation to harsh parenting.

A similar finding in Allan, Kashani, and Reid's 1998 study of 100 consecutive inpatients in a mental health center between the ages of 7 – 12 years old is that children with a hostile parent are more likely to have poor social skills and are more socially incompetent than children without a hostile parent. This incompetent social behavior includes aggressive behavior.

Aggressive behavior has been found to be related to the family and mental health as a result of family stress. Often this causes a youth to disengage from the cause of the stress. This disengagement is associated with aggression (Wadsworth & Compas, 2002) in addition to anxiety and depression. Although research has not specifically found the main components involved with relational aggression, some study's findings have found some links between aggression and the proposed predictors in this study.

Relational Aggression and Court-Involved Youth

Because there is a strong correlation with peer relationships and delinquent behavior and youth in the court system are involved in the system because of forms of delinquent behavior, research on this sample of youth may provide insight on relational aggression. They are also more likely to be at risk in areas of their lives than non court-involved youth. Girls specifically are more at risk than boys in most areas, such as education, traumatic experiences, and mental health (Gavazzi, Yarcheck, & Lim, in press). Because they are more at risk, generally, they may be more at risk also for being involved with relational aggression. Also, delinquency is tied to deviant peer relationships, and this may be a link that shows a higher rate of relational aggression in those youth that are delinquent and are therefore involved in the courts. In fact, in a study by Gavazzi, Yarcheck, and Lim (in press), a sample of court involved girls were found to have much greater risk than boys with regards to peer relations.

If a youth is in a negative family situation where antisocial behaviors are produced, children are more likely to interact with delinquent peers which leads to the refinement of their own delinquent behavior (Brendgen, Vitaro, & Bukowski, 2000). Studies have researched the social interaction model through which peer relationships play an important role in the development of delinquency if family has disrupted monitoring and inconsistent discipline (Disiong, Patterson, Stoolmiller, & Skinner, 1991). This relates to this sample of youth in that court-involved youth often have family problems as well as delinquent friends.

Delinquent peer relationships have characteristics that link them to aggression. A study by Pleydon and Schner (2001) of female offenders and high school students suggests in its findings that aggressive behavior in delinquent relationships is rewarded and accepted and is a quality in the types of individuals who seek out delinquent peer relationships. It is expected that

when a peer is involved in a delinquent peer relationship that aggression is a likely component of that relationship. Another study found specifically with girls that as they engage in maladaptive relationships with relational aggression, the level of relational aggression they use increases with time as that kind of antisocial relationship promotes the continued and growing use of relational aggression (Werner & Crick, 2004).

Mental Health and Family

> Hypothesis 4: Risk scores in the family domain will be significantly related to risk scores in the mental health domain. More specifically, higher levels of family risk will be significantly associated with higher risk scores in the mental health domain.

When adolescents are exposed to high levels of family stressors, they often attempt to cope by disengaging themselves from members of their family. This disengagement often is associated with the development of anxiety and depression symptoms (Wadsworth & Compas, 2002). The number of stressors a family experiences is an indicator of psychosocial maladjustment, as well; the accumulation of stressors in a family is related to both immediate and long-term problems in psychosocial adjustment (Forehand, Biggar, & Kotchick, 1998; Gavazzi & Schock, 2000).

Besides internalizing problems, externalizing behaviors also are associated with family problems. The study mentioned previously by Formoso, Gonzales, and Aiken (2000) found that conduct problems in youth are related to family conflict. Another study looked at family stress and the subsequent types of parental control of adolescents and found that this leads not only to internalizing but also externalizing problems in youth (Barber, 1992). Another study looking at aggression in families suggests that poor parenting relates to the adolescent externalizing behavior of displaying aggression.

METHODS

Sample: A sample of 272 youth, 38.2% which were female and 61.8% which were male, who were involved in the two Ohio county juvenile courts was used in the present study. One county represented 44.9% of the sample and the other was represented by 55.1% of the youth. The youth ranged in age from 10-18 years, with an average age of 14.9 years. Of the youth, 193 were White, non-Hispanic and 79 were Black, non-Hispanic. For family composition, 41.2% of the youth came from single-parent mother-headed families, 18.4% married biological parents, 17.6% stepfamilies, 4.8% grandparent-headed, 4.8% single-parent father-headed, 1.8% from some other family structure, 1.1% foster families, 0.7% from single parent mother-headed households with live-in boyfriend, and 0.4% from single parent father-headed households with live-in girlfriend. Data were missing of the sample regarding 9.2% family composition.

Measures: The Global Risk Assessment Device (GRAD) is a web-based risk assessment device that measures a variety of risks and needs in order to find the most appropriate services for a youth and his/her family. The GRAD is broken into eleven domains, including prior offenses, family/parenting, education/vocation, peers/significant relationships, personality/behavior, sociability, substance use/abuse, leisure, trauma, accountability, and health services. The instrument can be used in order to compare the risk level of these eleven areas, which helps to find correlations between different aspects of the youth's life. In having the ability to compare several different areas of a youth's life on this one assessment tool, there is the possibility to find relationships previously unknown in research. The GRAD offers a way to compare relational aggression to other areas of risk for youth.

Data for this study are from several of the domains of the web-based Global Risk Assessment Device (GRAD) youth and parent versions. The youth version is administered by a court official. Both the versions contain the same items, yet each is worded to be appropriate to the reporter. The domains used will be peer, family/parenting, and personality/behavior (mental health). Each domain is comprised of a set of items which can be answered on a scale of 0 to 2, where each number represents how much the items applies to the child's life: a 0 indicates no/never, 1 indicates yes/a couple of times, and 2 indicates yes/a lot (Gavazzi, 2004). The way in which the child responds indicates the level of risk that child has in that subdomain; the higher the scores for the items, the higher the risk. Overall, each youth will be ranked at low risk, moderate risk, or high risk for each domain depending on their answers to the items. Demographics information asked on the GRAD will provide the gender of the subjects.

Five items in the peers/significant relationships domain that specifically concern the subdomain of relational aggression will be used. The family/parenting domain contains seventeen items, which includes items on family interactions, conflict, and economic stress. The personality/behavior (mental health) domain contains twenty-six items that inquire about both internalizing and externalizing symptoms. (see Appendix B)

This data will then be looked at statistically, looking at gender in all three domains as well as looking at the associations between the different domains. *T*-test analysis will be used to examine potential gender differences regarding the family, mental health, and relational aggression variables. Correlational analyses will be used to examine the associations between the risk domains regarding family, mental health, and relational aggression.

RESULTS

> Hypothesis 1: Gender will significantly impact family, mental health, and relational aggression. More specifically, females will exhibit higher risk scores than males on all three measures of these variables.

In order to test hypothesis 1, *t*-test analyses were run for both the adolescent and parent reports on the relational aggression items from the peers/significant relationship domain, the family/parenting domain, and the personality/behavior (mental health) domain. One significant gender difference with parent reports of relational aggression was found ($t = 2.01$, $p < .05$). In this instance, parents reported significantly higher levels of relational aggression for females (.26) than for males (.17). No other analyses produced significant results.

> Hypothesis 2: Risk scores in the family domain will be significantly related to risk scores in the peer relationships subdomain of relational aggression. More specifically, higher levels of family risk will be significantly associated with higher risk scores in the relational aggression subdomain.

Correlations were run for both the youth and parent reports from the family/parenting domain and the relational aggression items from the peers/significant relationships domain. A significant relationship was found in both the adolescent reports ($r = .61$, $p < .001$) and parent reports ($r = .56$, $p < .001$), indicating support for this hypothesis.

> Hypothesis 3: Risk scores in the mental health domain will be significantly related to risk scores in the peer relationships subdomain of relational aggression. More specifically, higher levels of mental health risk will be significantly associated with higher risk scores in the relational aggression subdomain.

Correlations were run for both the youth and parent reports from the personality/behavior (mental health) domain and the relational aggression items from the peers/significant relationships domain. A significant relationship was found in both the adolescent reports ($r = .73$, $p < .001$) and parent reports ($r = .60$, $p < .001$), indicating support for this hypothesis.

Hypothesis 4: Risk scores in the family domain will be significantly related to risk scores in the mental health domain. More specifically, higher levels of family risk will be significantly associated with higher risk scores in the mental health domain.

Correlations were run for both the youth and parent reports from the family/parenting domain and the personality/behavior (mental health) domain. A significant relationship was found in both the adolescent reports ($r = .78$, $p < .001$) and parent reports ($r = .80$, $p < .001$), indicating support for this hypothesis.

DISCUSSION

To date, the research on relational aggression to date has been inconclusive in regards to gender. Much of the previous research that looked at gender as the primary determinant of involvement in relational aggression produced mixed findings: some literature found girls more likely to be involved in relational aggression (Crick & Grotpeter, 1995; Crick & Bigbee, 1998; Xie, Cairns, & Cairns, 2002; Salmivalli, Kaukianinen, and Lagerspetz, 2000) where other literature found no such gender differences (Phelps, 2001; Prinstein, Boergers, & Vernberg, 2001; Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001).

Perhaps the reason that gender has not been a consistent predictor of relational aggression risk is because there may be other factors involved. Unfortunately, to date much of the research does not go beyond the use of gender in terms of examining further variables that may explain why youth are more likely to become involved in relational aggression or not.

The main goal of this study was to examine other elements that may play a role in determining who becomes involved in relational aggression. Family and mental health problems were the two aspects other than gender considered in the study. Originally the expectation was

that there would be a relationship found between gender, family, mental health, and relational aggression but findings suggest that gender does not have a dominant influence on the likelihood of involvement with this type of aggression. Instead, problems within the family and mental health issues were better predictors.

Gender did not play as much of a role as was thought originally. The present study hypothesized that females would display higher levels of risk in relational aggression, family, and mental health. The GRAD assessment was given to both the youth and the parents and the only significant gender difference occurred in the parent assessment regarding relational aggression. This is in accordance with some of the literature on relational aggression (Phelps, 2001; Prinstein, Boergers, & Vernberg, 2001; Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001) that found no gender differences reported by adolescents.

The findings on gender and relational aggression from the parent's perspective produced findings that were somewhat different from the previous research. In one study where court-involved boys and their siblings were assessed for involvement in relational aggression by their mothers, no gender differences were reported (Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001). However, the parent perspective from the present study produced the only gender differences, such that females were found to be more involved in relational aggression than boys. It would be hoped that there would be some concurrence in parent reports with the present study and the study done by Tiet and colleagues (2000), especially because the present study had 41.2% single-parent mother-headed households, a similar sample to Tiet and colleagues. Having concurrence with parent perspectives on relational aggression might help to explain differences in literature on relational aggression. Because the present study examined both adolescent and parent perspectives and there was a difference in findings between these two groups, it would be

helpful to have an accord between the parent perspectives on different studies of relational aggression. If there were concordance with parent perspectives it might help to explain the differences in the present study between parent and adolescent perspective. For instance, the agreement in research on parent perspectives might explain how parents and adolescents perceive levels of relational aggression between girls and boys differently. However, because there is no agreement with Tiet and colleagues (2000) and the present study, the gender differences perceived by parents as compared to adolescents can only be hypothesized and further studies between parent and adolescent perspectives should be conducted.

Interestingly, there were no gender differences displayed with regard to the other main variables of this study. The lack of gender differences stands in contrast with much of the literature that states that females are often more at risk than males in family matters (Cummings, Pepler, & Moore, 1999; Ruschena, Prior, Sanson, & Smart, 2005) and in terms of mental health issues (Rosenfield, Vertefeuille, & McAlpine, 2000; O'Hare, 1995; Broderick & Korteland, 2002; Rudolph, 2002).

Something to note is a previous study that used the GRAD but had a different sample of youth. The present study examine 272 youth from two counties in Ohio, 61.8% of which were male. All the youth were assessed as well as their parents or caregivers. Gavazzi and colleagues (in press) had a sample of 103 youth with 61.1% females. This study directly assessed 86% of the youth and the other 14% were parent or caregivers. Contrary to the present study, Gavazzi and colleagues (in press) found that girls were at higher risk in almost every domain, including the family, peer, and mental health domains used in the present study. Because these are court-involved youth entering the system for a variety of offenses, possibly the two samples had inherent differences based on offense that could have affected the gender differences, or lack

thereof. Further investigations should be done to see what differences existed in the present study and Gavazzi and colleagues (in press) that might clarify these differences in gender.

In support of the present study's findings, other research have found that females are less or equally likely to be at risk in the domain of mental health. For instance, a study by Galambos, Leadbeather, and Barker (2004) found that there were no differences in female levels of depressive symptoms in early adolescence relative to males. Also in support with the present study's findings, another study looking at both mental health and family risk found that elementary aged boys who had witnessed domestic violence were found to have higher levels of depressive symptoms and lower self-esteem than girls (Reynolds, Wallace, Hill, Weist, & Nabors, 2001).

Relational aggression and family were significantly associated in the present study. This concurs with other findings about aggression and family-related variables (Chang, Schwartz, Dodge, & McBride-Chang, 2003; Allan, Kashani, & Reid, 1998; Wadsworth & Compas, 2002). While previous research has examined family problems and aggression generally, it has not looked specifically at family and relational aggression in youth. The present study has shown that there is indeed a relationship between relational aggression and family problems. A possible explanation could be that issues in the family that result in destructive interactions teaches youth to interact with peers in a similarly destructive manner. Therefore, the more problems with family interactions, the more problems a youth will have interacting with peers and relational aggression is a manifestation of the problems the youth has with interacting. This contribution to the literature hopefully will initiate other studies on relational aggression and its relationship with the family.

Mental health and relational aggression also were found to be strongly correlated. This concurs with the literature that relational aggression and mental health are related (Crick & Bigbee, 1998; Crick & Grotpeter, 1995; Prinstein, Boergers, & Vernberg, 2001). One possibility is that more relational aggression leads to greater mental health issues as involvement in relational aggression demonstrates a type of negative social behavior which can lead to not being accepted by peers, and which in turn may lead to the development of mental health problems. Another explanation could be that the mental health problems lead to relational aggression involvement. As the youth have their own issues with mental health, they may choose relational aggression as a means of acting out those problems. More likely is a third explanation that there is a reciprocal relationship by which mental health problems and relational aggression are linked to one another (Prinstein, Boergers, & Vernberg, 2001). More research specifically on mental health and relational aggression can be developed from these findings in order to learn more about the direction of the relationship between mental health and relational aggression.

Among the findings was that risk in the family is significantly correlated to risk in mental health. As more problems occur in the family, more problems occur in mental health, a finding that is consistent with previous literature (Wadsworth & Compas, 2002; Forehand, Biggar, & Kotchick, 1998; Gavazzi & Schock, 2000; Formoso, Gonzales, & Aiken, 2000; Barber, 1992). This can be explained by several aspects of family issues that the GRAD covers in its assessment. One aspect of the family that can affect mental health is sibling interaction. Greater conflict in sibling relations is associated with higher levels of anxiety and depressed mood, a relationship that has been found even to be of greater influence than parent-child relationships (Stocker, Burwell, & Briggs, 2002). Marital conflict is another family variable measured by the GRAD, and the level of marital conflict in the family has been found to have a significant effect

on adolescent adjustment (Turner & Barrett, 1998; Gavazzi & Schock, 2003). Parenting practices, including supervision and discipline, are still other family-related variables measured by the GRAD and among the strongest predictors of child maladjustment (Dwyer, Nicholson, & Battistutta, 2003). Youth mental health is greatly affected by their families, and much research concurs on this.

Implications

This study has shown that there are more underlying factors related to relational aggression than simply gender. The findings of this study can be used to help intervene with youth who display relational aggression. For instance, mental health and family issues can be dealt with in interventions of those youth who are involved in relational aggression. Likewise, those youth who enter intervention with family and mental health problems can be assessed for possible difficulties related to relational aggression. With the knowledge that mental health and family issues are related to this form of aggression, youth with family and mental health problems can be helped to prevent involvement in relational aggression or to stop involvement in it.

This also has implications for studies of all forms of aggression. Instead of assuming that gender differences explain aggression, it would be wise to look deeper into other variables. In looking only at gender as the main correlation to aggression, much is left out in understanding deeper issues of aggression. More should be examined in regards to the underlying variables of aggression to become familiar with all the issues that contribute to displays of aggression. The present study has shown that gender became an obsolete variable once other factors had been taken into consideration. Research can take what was found in the present study as a model

where gender became obsolete once the data were analyzed and apply that to future studies of aggression.

Limitations

One main issue to consider in the present study is the sample used. This is a sample of court-involved adolescents which possess much more risk in their lives than most of the general population. This study should be recreated with a sample of the typical population to see if the findings are generalizable. Court-involved youth are more at risk than most typical youth so these risk areas may have played a factor in seeing relationships between relational aggression, family, and mental health.

In addition, this study examined adolescents ranging in ages of 10-18, with an average age of 14.9 years. This stage of development is distinct from any other stage and may have unique characteristics that helped to create the relationships between family, mental health, and relational aggression. As adolescence is a time of development of identity and confusion with that, perhaps this sample of youth had more conflict with peers than is typical of other ages producing more aggression across genders. The relationship with family and mental health with relational aggression should also be examined in samples of other ages of youth.

Another limitation is the broad scope of the items in the GRAD. Because the GRAD is designed to look at the whole realms of mental health and family/parenting, the present study focused on the broad topics covered in these items. Further research should look further into the specific items of the GRAD to see if there are particular issues in family and/or mental health that are better predictors of relational aggression than others. For example, it may be that internalizing mental health displays play more of a role in relational aggression than

externalizing displays. Research in the specifics of the areas of mental health and family should be examined more thoroughly.

Future Studies and Conclusion

This research should be continued with other samples of youth in order to gain the largest scope of these relationships with relational aggression, family, and mental health as is possible. Studies that might provide interesting insight would include sample of youth who come to the attention of psychologists and family therapists, given the rather significant relationships between relational aggression and both mental health and family-oriented problems. This area of study should also be extended to those youth not involved in the court system. This would be of interest to see if these relationships are able to be generalized to more than just at risk youth.

Other studies should be performed that focus more on the specifics of the relational aggression measure used in the present study. In particular, studies should focus specifically on victimization and perpetration of relational aggression. The present study looked at general involvement with relational aggression without looking particularly at differences in victimization and use of relational aggression. Conceivably, certain aspects of mental health and family favor the use or victimization of relational aggression. For example, possibly mental health issues that elicit externalizing and acting out behavior may produce an aggressor of relational aggression where mental health issues that elicit internalizing behavior may produce a victim of relational aggression instead. Likewise with family, youth who take more of the aggressor role in family conflicts and problems may be more of a relational aggressor where those youth who take more of the victim role in family issues may be more of a victim of relational aggression. Future research can examine if differences in gender or other variables

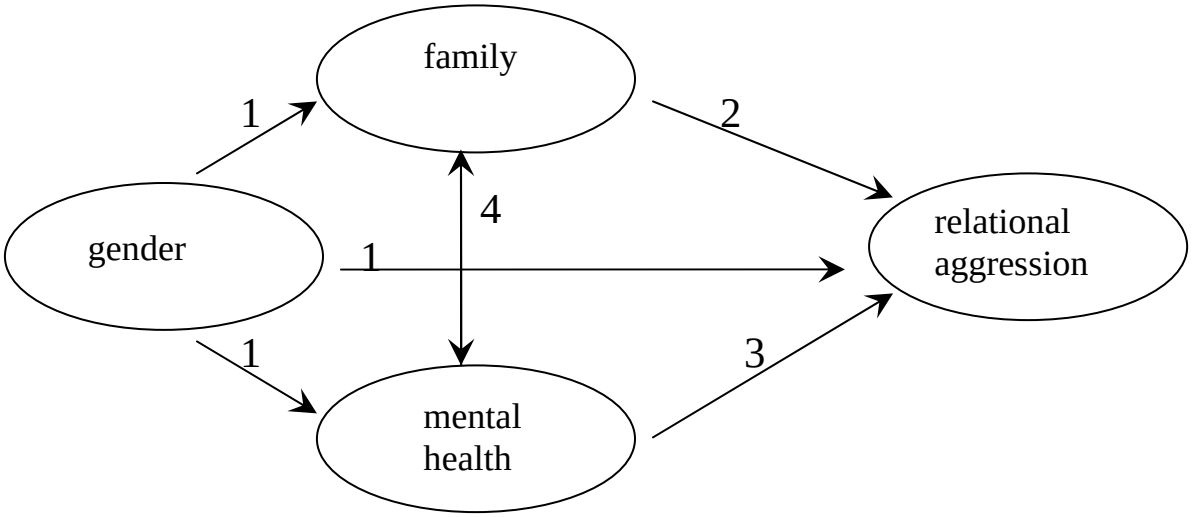
will occur based on the youth as the aggressor or the victim. Also interesting would be to examine the specific mental health and family problems that lead to relational aggression.

Further research should also examine protective factors of relational aggression. There may be some youth who have the same family and mental health problems as other youth, yet do not engage in relational aggression. It would be interesting to see if there are other areas of a youth's life that help to reduce or prevent involvement in relational aggression. One consideration could be having a strong educational motivation or influence. If the youth is finding teachers to model or has a strong desire to do well in school, the influences of peers may not be as significant to that youth and therefore the youth may not feel compelled to engage in relationships that involved relational aggression. This would need to be examined further and the GRAD is a device that provides much information on one youth through its assessment of 11 domains; these domains can be compared and contrasted with those youth who share the same mental health and family risks but who do not share the same risk in relational aggression.

The present study has provided some interesting concepts about relational aggression that have not been tied together in other research. Hopefully it provided some insight to why some youth are more relationally aggressive and/or victimized than other youth. A better understanding of peer relations is a result of knowing which youth are more at risk for being perpetrators or victims of relational aggression. Because it was found that mental health and family are an integral part in determining relational aggression, a contribution of this study is a link between relational aggression, family, and mental health that research has not yet explicitly found.

APPENDIX A: FIGURE OF HYPOTHESES

Numbers correspond with the numbers of the hypothesis.



APPENDIX B: ITEMS USED FROM GRAD (YOUTH VERSION)

Peers Domain – Relational Aggression Subdomain (5 items)

1. How often do you have frequent of longstanding arguments with other youth?
2. Do you ever gossip or spread rumors about other youth?
3. Have you ever bullied or were cruel to someone your own age?
4. Do other youth lie, gossip or spread rumors about you?
5. Have you ever been bullied or have other youth been cruel to you?

Family/Parenting Domain (17 items)

1. How often do you get into fights with adults who live in your home?
2. How much of the time do the adults who live with you not know where you are?
3. Are family members ever to critical of you?
4. Do you ever feel that you are not welcome to stay in your home?
5. At you ever at-risk of harm or are in physical danger if you are in you home?
6. When you are punished for your behavior it is harsh (the punishment is worse than the behavior) or inconsistent (the punishment is never the same twice for the same behavior)?
7. How often have you been involved in a physical fight (shoving, hitting, punching etc.) with an adult family member as a result of something you did wrong?
8. How often are adults who live in your home verbally abusive to you (swearing, calling you names etc.)?
9. Do you ever become more uncontrollable after they you have been punished?
10. Do your family members ever seem to go out of their way to not upset you?

11. Does it ever seem like your family members tip-toe around you?
12. How often do you fight with your brothers and sisters?
13. Does it seem like the adults in your home do things themselves instead of asking you to do them?
14. Does your relationship with your mother ever feel not so good?
15. Does your relationship with your father ever feel not so good?
16. Does your family have a hard time paying bills and buying food?
17. Has your family ever been contacted by a social service agency because of your something happening in your home?

Personality/Behavior (Mental Health) Domain (26 items)

1. Do you ever have difficulty controlling your anger?
2. Do you ever exaggerate how good you are at doing something)?
3. Do you ever have trouble paying attention or concentrating?
4. Are you ever high strung or tense?
5. Are you ever nervous or do you ever get started easily?
6. Do you ever have a hard time sitting still?
7. Do you ever try to get attention from someone anyway you can?
8. Do you ever try to get even with people when they do something to you?
9. Do you ever destroy things that belong to you when you get angry?
10. Do you ever yell, shout or curse too much?
11. Have you ever threatened to harm people?
12. Have you ever been physically aggressive towards others?
13. Do you ever get into a motor vehicle with others who drive under the influence of drugs and/or alcohol?
14. Do you ever do things to hurt your body, like cutting yourself?
15. Do you ever do things that are dangerous, like jumping from high places, moving cars etc.?
16. Do you ever have bad dreams or nightmares?
17. Do you ever have difficulty sleeping?
18. Have you ever lost interest in things you used to enjoy?
19. Do you ever feel sad, moody, blue or depressed?
20. Do you ever feel like you can't trust anyone?
21. Have you ever experienced a major change in appetite (either increase or decrease)?
22. Do you ever have panic attacks?
23. Do you ever have difficulty breathing, pain in your chest, or it feels like your heart is pounding too much?
24. Have you ever felt like you were physically numb to pain?
25. Do you ever feel like you think about or talk about sex too much?
26. Do you ever feel like you don't belong anywhere because of the color of your skin or the family you come from?

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